8.1.2. Containment Wall

Sheet pile containment is proposed along the northern boundary of the Site (Figure 14). The containment wall is proposed to be installed to a depth of 55 feet. This barrier will prevent contaminated groundwater from flowing away from the site and prevent any potential impacts to off-site sources. Prior to the installation of the sheet pile containment, a baseline surface water and groundwater elevation study will be conducted in order to provide baseline flow conditions. Over a period of two weeks, this study will include continuous water elevations from existing on-site monitoring wells and the Passaic River adjacent to the site.

Following the installation of the proposed sheet pile containment, a follow-up surface water and groundwater elevation will be conducted to evaluate the impact of the containment on on-site groundwater levels. These data will be compared to the baseline conditions. Recovery wells are not proposed and will not be required. Based on the current bulkhead (to approximately 30 feet bgs), groundwater mounding in the surficial and upper glacial aquifers is not observed on the Site; and therefore, hydraulic controls will not be necessary.

Two monitoring wells are proposed to be sampled at each end of the wall to be included the monitoring program described below. Monitoring wells will be constructed in accordance with the N.J.A.C. 7:9D requirements for Category 3 wells. All confining units will be properly isolated with permanent casing. Because the wells will be installed in an area of known contamination, the outermost isolation casing shall extend at least 20 ft into the confining layer or to the base of the confining layer as per N.J.A.C. 7:9D-2.2(b). All boreholes will have a diameter which is a minimum of 4 inches greater than the well casing diameter. Upon completion of each monitoring well, a monitoring well construction diagram will be completed. The driller's monitor well record and the NJDEP Well Permit and Form A (monitoring well certification, as-built) will be provided for each monitoring well.

Following installation and well development, all monitoring wells will be surveyed by a New Jersey-licensed surveyor. All well locations will be provided in New Jersey State Plane Coordinates using NAD 1983. The elevation of the ground surface, the top of outer casing (TOC), and a reference notch on the top of the inner casing will be surveyed using NAVD 1988. A NJDEP Form B (monitoring well location certification) will be executed for each monitoring well.